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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,611	08/25/2003	Senis Busayapongchai	60027.0322US01/BS030093	2844
39262 7590 01/16/2009 MERCHANT & GOULD BELL SOUTH CORPORATION P.O. BOX 2903 MINNEAPOLIS, MN 55402				
EXAMINER				
SHAH, PARAS D				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/647,611

Applicant(s)

BUSAYAPONGCHAI, SENIS

Examiner

PARAS SHAH

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to the Arguments filed on 10/09/2008. Claims 1, 3-11 remain pending and have been examined. The Applicants' amendment and remarks have been carefully considered, but they are not persuasive and do not place the claims in condition for allowance. Accordingly, this Action has been made FINAL.
2. All previous objections and rejections directed to the Applicant's disclosure and claims not discussed in this Office Action have been withdrawn by the Examiner.

Response to Arguments

3. Applicant's arguments, see pages 6-8, filed 10/09/2008, with respect to the rejection(s) of claim(s) 1, 3-11 under 103(a) have been fully considered but they are moot in view of new grounds for rejection. Specifically, the newly added limitations of "loading a speech recognition grammar associated with possible alphabetic character" and "receiving and recognizing user speech with the loaded speech recognition grammar" necessitates new ground for rejection.

Response to Amendment

4. Applicants' amendments filed on 10/09/2008 have been fully considered. The newly amended limitations in claims 1 necessitate new grounds of rejection.

Claim Objections

5. Claim 3 is objected to because of the following informalities: "wherein the set" should be "further comprising a set" in line 1. Appropriate correction is required.
6. Claim 8 is objected to because of the following informalities: The claim should be dependent upon claim 1. Further, "wherein the set" should be "further comprising a set" in line 1. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In regards to claim 5, which is directed to the defining of a set of alphabetic characters includes phonetic version of alphabetic characters. It is unclear from claim 1, how a DTMF input can include phonetic versions if each number in a DTMF entry corresponds to a specific letter. Further, from the Specification, paragraphs [0003] and [0027] support the use of a spoken input into a speech recognizer for recognizing phonetic input. It is further unclear as to whether the alphabetic characters that are being referenced to in claims 5-7 correspond to the DTMF input or after prompting the user to speak the alphabetic characters previously entered. The Applicant has cancelled limitations in claim 1 directed towards an initial spoken input. Hence, for the purposes of compact prosecution such limitations have not

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been considered since the claims were interpreted to refer to the initial character input, which for this case is the DTMF input.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 3, 4, 8-10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brotman *et al.* (US 5,917,889), hereinafter Brotman *et al.* (889) in view of Denenberg *et al.* (US 6,728,348), hereinafter, Denenberg.

As to claim 1, Brotman *et al.*(889) teaches a method for

receiving an initial input comprising a first keypad entry of plural alphabetic characters using a dual-tone multi-frequency (DTMF) key tone for each of the characters (see col. 4, lines 16-20, where the user depresses DTMF keys corresponding to a string of words);

playing back the keypad entry to the user (see col. 5, lines 48-51, where the system inquires whether the generated string is correct) and querying the user to determine whether the entered keypad character input is correct (see col. 5, lines 56-57, where the user answers yes/no);

if input received from the user indicates that the keypad entry played back to the user does not match the entered keypad character input (see col. 5, lines

65-col. 6, lines 6, it is determined whether the generated string corresponds to the intended string and if it does not the user re-enters string);

loading a speech recognition grammar associated with possible alphabetic characters that correspond to the DTMF character input by the user (see col. 5, lines 10-17, where the system accesses a subset of stored signals indicating the DTMF input);and

prompting the user to speak the previously entered alphabetic characters (see col. 4, lines 60-65, where the user utters the entered string);

receiving and recognizing user speech with the loaded speech recognition grammar(see col. 5, lines 8-25, where the uttered characters are used in disambiguating among the DTMF input, from the allowed character set for matching and see col.. 4, lines 36-41 and see col. 5, lines 18-25, where a best match between the stored signals and the utterance is determined for the best alphabetic character);

prompting the user to verify an identified character string as a correct character string (see col. 5, lines 48-59, where the user verifies the identified character string.).

However, Brotman does not specifically teach the speech recognition grammars associated with possible alphabetic character combinations.

Denenberg teaches the speech recognition grammars associated with possible alphabetic character combinations (see col. 5, lines 61-col. 6, lines 15,

where the dictionary generator generates grammar using possible character combinations and is used for recognizing the user utterance).

It would have been obvious to one of ordinary skilled in the art at the time the invention was made to have modified the disambiguation as taught by Brotman with the speech grammar with possible character combinations as taught by Denenberg to provide a system that outputs a multiple possible words from limited text (see Denenberg col. 1, 10-16).

As to claims 3 and 4, Brotman *et al.* (889) in view of Denenberg teach all of the limitations as in claims 1 and 2.

Furthermore, Brotman *et al.* (889) teaches a system that uses alphabetic (see abstract) letters for input by user (see Figure 2, element 610) in a speech recognition engine. (e.g. It should be noted that the reference does not specifically state the letters of the alphabet, the reference incorporates the English alphabet as input to the speech recognizer. It would be obvious to include the letters a-z in the alphabet).

As to claims 8-10 Brotman *et al.* (889) in view of Denenberg teach all of the limitations as in claims 1 and 2.

Furthermore, Brotman *et al.* (889) teaches a method whereby the alphabetic character input received involves the use of DTMF key tones (see col.

5, line 5), which include numbers (see col. 4, lines 18-25). It is inherent for a telephone keypad to include numbers 1-9.)

As to claim 11, Brotman *et al.* (889) in view of Denenberg teach all of the limitations as in claims 1, 2, and 8-10.

Furthermore, Brotman teaches wherein the set of alphabetic characters includes all alphabetic characters associated with the DTMF key tones (see col. 4, lines 36-41, where each number has a characteristic set of characters associated with it).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PARAS SHAH whose telephone number is (571)270-1650. The examiner can normally be reached on MON.-THURS. 7:00a.m.-4:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571)272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paras Shah/
Examiner, Art Unit 2626

01/08/2009

/Patrick N. Edouard/
Supervisory Patent Examiner, Art Unit 2626